

Study of correlation between maternal depression and neonatal anthropometric measurements

Abstract

Introduction and Objective: According to World Health Organization (WHO), depression is the top ranking among all diseases to cause disability and morbidity. As a result of their biological characteristics and peculiar interactions with socio-economic environment, women are affected by depression twice more than men. There are reports that indicate mental disorders may have effects on outcomes of pregnancy; various studies showed that in a mental disorder background the incidence of low birth weight, very-low birth weight, and pre-term labor increases by 1.5 to 3-fold. Our objective was to investigate correlation between maternal depression and neonatal anthropometric measurements (indices).

Methods and Materials: Our study is a cross-sectional study and included all mothers that referred to Allavi Hospital for delivery during two months of February and March of 2010.

Sampling was performed by simple method from available specimens and the final sample included 445 pairs of mothers and newborns. Two questionnaires were designed; the first one to record mothers' demographic information, history of previous pregnancies, and measurements of the neonate and the second one to determine mother's depression. Analysis of the collected data was performed by SPSS software, version 17 and statistical tests including T-test and χ^2 .

Results: The average age of mothers was 25 ± 5.9 years. Average gestational age of mothers was 271.4 ± 12.8 days. 47 % of mothers underwent C-sections, 54.2 % of the newborns were boys, and 50.3 % of mothers were residents of rural areas. Average birth weight of the newborns was 3315 ± 464 grams, average length and head circumference of newborns were 49.3 ± 2.7 and 34.8 ± 1.2 centimeters, respectively. 11.7 % of the neonates were pre-terms.

Using Beck's test? , 7.9 % of mothers (35 individuals) were confirmed to have depression and neonatal anthropometric measurements did not show significant difference between the two groups of depressive and non-depressive mothers ($p > 0.05$).

Conclusion: In this study no correlations was found between mothers' depression and anthropometric indices of the neonates.

Keywords: Depression, Pregnancy, Anthropometric Indices Neonate.